

# Get Smart About Antibiotics Week 2012

We present a look at the importance of antimicrobial stewardship, the topic of the Centers for Disease Control and Prevention (CDC)'s Get Smart About Antibiotics Week, held Nov. 12-18, 2012



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Infections caused by resistant bacteria have become more common, and many bacteria have become resistant to multiple antibiotics. This trend demands urgent action by patients, healthcare providers, facility administrators and healthcare insurers to preserve the last lines of defense against many of these pathogens. In conjunction with Get Smart About Antibiotics Week, Nov. 12-18, 2012, CDC and partners will release new data on Americans' knowledge of antibiotic resistance and appropriate antibiotic use, and a policy statement highlighting strategies to conserve and replenish the nation's antibiotic resources. Antibiotic resistance is associated with:

- Increased risk of hospitalization
- Increased length of stay
- Increased hospital costs
- Increased risk of transfer to the intensive care unit
- Increased risk of death

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“The threat of untreatable infections is real. Although previously unthinkable, the day when antibiotics don’t work is upon us. We are already seeing germs that are stronger than any antibiotics we have to treat them. ”

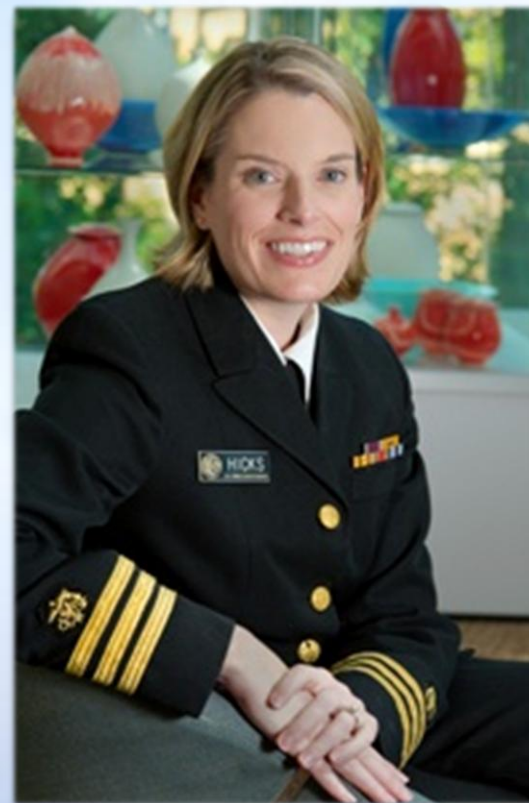
*- Arjun Srinivasan, MD, associate director for healthcare-associated infection prevention programs, Division of Healthcare Quality Promotion, Centers for Disease Control and Prevention*



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“We need antibiotics to combat life-threatening bacterial infections, and overuse of these drugs promotes resistance and reduces their effectiveness.”

*- Lauri Hicks, DO, medical epidemiologist and director of Get Smart: Know When Antibiotics Work, Respiratory Diseases Branch, Centers for Disease Control and Prevention*



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## The Scope of the Problem

- Antibiotic resistance occurs when bacteria change in a way that reduces or eliminates the effectiveness of antibiotics.
- Infections with resistant bacteria have become more common in healthcare and community settings, and many bacteria have become resistant to more than one type or class of antibiotic.
- Antibiotics can cure bacterial infections, not viral infections. Treating viruses with antibiotics does not work, and it increases the likelihood that you will become ill with an antibiotic-resistant bacterial infection. Antibiotics are powerful tools for fighting illness, but overuse of antibiotics has helped create new strains of infectious diseases. The problem is that we expect antibiotics to work for every illness, but they don't. >>>



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- It is estimated that more than 50 percent of antibiotics are unnecessarily prescribed in office settings for upper respiratory infections (URIs) like cough and cold illness, most of which are caused by viruses.
- Up to 50 percent of antibiotic use in hospitals is either unnecessary or inappropriate.
- In children, reactions to antibiotics are the most common cause of emergency department visits for adverse drug events.
- Children may have up to nine colds each year. Three out of 10 children who visit an outpatient provider with the common cold receive an antibiotic. This is an improvement from previous years, but antibiotics are not indicated for a common cold.

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## Inpatient Settings

- Antibiotic resistance adversely impacts the health of millions of hospitalized patients every year.
- Of the patients receiving antibiotics, half will receive unnecessary or redundant therapy, resulting in overuse of antibiotics.
- Unnecessary use of antibiotics creates risk of adverse drug events and *Clostridium difficile*, a deadly diarrheal infection that is on the rise.
- Some infections in hospitals are now resistant to all available antibiotics.

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## Outpatient Settings

- Each year, tens of millions of antibiotics are prescribed unnecessarily for viral upper respiratory infections.
- In states where there is more antibiotic use, there are more antibiotic-resistant pneumococcal infections.
- Antibiotic use in primary care is associated with antibiotic resistance at the individual patient level.
- The presence of antibiotic-resistant bacteria is greatest during the month following a patient's antibiotic use and may persist for up to 12 months.



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## Why We Must Act Now

- The way we use antibiotics today or in one patient directly impacts how effective they will be tomorrow or in another patient; they are a shared resource.
- Antibiotic resistance is not just a problem for the person with the infection. Some resistant bacteria have the potential to spread to others – promoting antibiotic- resistant infections.
- Since it will be many years before new antibiotics are available to treat some resistant infections, we need to improve the use of antibiotics that are currently available.

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## What You Can Do

- Patients can take antibiotics exactly as the doctor prescribes, complete the prescribed course of treatment even when starting to feel better, and ask what treatment would be best for their illness instead of demanding antibiotics from their doctor, if not needed.
- Healthcare providers can prescribe correctly; collaborate with other providers and patients; stop, and assess, and embrace antibiotic stewardship.
- Healthcare facility administrators and payers can focus on reducing unnecessary antibiotic use, which can reduce antibiotic-resistant infections such as *Clostridium difficile* infections, along with decreasing costs. This can improve patient outcomes.

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## Healthcare providers can:

### *1. Prescribe correctly*

- Refrain from treating viral syndromes with antibiotics, even when patients ask for them.
- Prescribe the right antibiotic at the right dose for the right duration; be familiar with resistance trends in your region.
- Avoid unnecessary overlaps in antibiotics. It is not usually necessary to give two antibiotics to treat the same bacteria.

### *2. Collaborate with each other and with patients*

- Talk to your patients about appropriate use of antibiotics.
- Include microbiology cultures when placing antibiotic orders. >>>

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- Work with pharmacists to counsel patients on appropriate antibiotic use, antibiotic resistance, and adverse effects.
- Utilize patient and provider resources offered by CDC and other professional organizations.

## *3. Stop and assess*

- Take an “antibiotic timeout” when a patient’s culture results come back in 24 to 48 hours. Stop and assess the use of antibiotics, using them only when indicated to avoid promoting the development of resistance among bacteria and unnecessary antibiotic exposure.

## *4. Embrace antibiotic stewardship*

- Improve antibiotic use in all facilities—regardless of size— through stewardship interventions and programs, which will improve individual patient outcomes, reduce the overall burden of antibiotic resistance, and save healthcare dollars.
- Recognize and participate in CDC’s Get Smart About Antibiotics Week initiatives.

# Get Smart About Antibiotics Week 2012

The “Get Smart for Healthcare” program is an extension of CDC’s “Get Smart: Know When Antibiotics Work” campaign, which is focused on improving antibiotic use in healthcare settings.

The goals of the “Get Smart for Healthcare” program are:

- Improve patient safety through better treatment of infections.
- Reduce the emergence of antimicrobial resistant pathogens and *Clostridium difficile*.
- Heighten awareness of the challenges posed by antimicrobial resistance in healthcare and encourage better use of antimicrobials as one solution.

For details, visit: <http://www.cdc.gov/getsmart/healthcare/>

